

What is claimed is:

1. A human prostate cancer-associated neuroendocrine (NE)-like cell line.

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2. A human prostate cancer-associated neuroendocrine (NE)-like cell line of claim 1, which is NE-1-3.

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3. A human prostate cancer-associated neuroendocrine (NE)-like cell line of claim 1, which is NE-1-8.

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4. A human prostate cancer-associated neuroendocrine (NE)-like cell line of claim 1, which is NE-1-9.

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5. A method for obtaining a NE-like cell line from prostate cells wherein said cell line is cultured under conditions of hormone deprivation, said method comprising the steps of:

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a) seeding hormone-responsive human prostate cells in culture for a suitable time period to allow said cells to undergo at least one round of cell division;

b) contacting said cells with a hormone-reduced medium;

c) propagating said cells in said hormone-reduced medium; and

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d) isolating subclone NE-like cell populations that survive in said hormone-reduced medium.

6. A method for identifying agents which modulate biomarker expression in NE-like subclone cells, comprising the steps of:

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a) contacting said NE-like subclone cells with

agents suspected of modulating biomarker expression in said NE-like subclone cells; and

b) assaying biomarker expression levels in said NE-like subclone cells.

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7. The method of claim 6, wherein said biomarkers are selected from the group consisting of NSE, NT, AR, PSA, EGFR, ErbB-2, ErbB-3, RPTP α , ERK1, ERK2 and MEK.

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8. The method of claim 6, wherein said NE-like subclone cells are selected from the group consisting of NE-1-3, NE-1-8 and NE-1-9.

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9. The method of claim 6, where said NE-like subclone cells are NE-1-3 cells.

10. The method of claim 6, wherein said NE-like subclone cells are NE-1-8 cells.

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11. The method of claim 6, wherein said NE-like subclone cells are NE-1-9 cells.